# CALIFORNIA'S HEALTH

WILTON L. HALVERSON, M.D. DIRECTOR OF PUBLIC HEALTH

# STATE DEPARTMENT OF PUBLIC HEALTH

PUBLISHED SEMI-MONTHLY

SAN FRANCISCO 2. 760 MARKET STREET

ENTERED AS SECOND-CLASS MATTER JAN. 25, 1949, AT THE POST OFFICE AT SAN FRANCISCO, CALIFORNIA, UNDER THE ACT OF AUG. 24, 1912. ACCEPTANCE FOR MAIL-ING AT THE SPECIAL BATE APPROVED FOR IN SECTION 1103, ACT OF OCT. 3, 1917 STATE BOARD OF

DR. CHARLES E. SMITH, President San Francisco

DR. JAMES F. RINEHART, Vice President

DR. ELMER BELT Los Angeles

DR. HARRY E. HENDERSON

PUBLIC HEALTH

DR. SANFORD M. MOOSE

DR. ERROL R. KING

DR. SAMUEL J. McCLENDON

DR. WILTON L. HALVERSON,
Executive Officer
San Francisco

VOLUME 9, NUMBER 2

JULY 31, 1951

ANN WILSON HAYNES, Editor ALTON E. WILSON, Associate Editor

# The Gilroy Community X-ray Survey

WALTER A. HUNTING, Chairman of Central Planning Committee, Gilroy X-ray Survey

The Gilroy Community X-ray Survey ended three weeks of intensixe X-raying on October 20, 1950, with 4,196 persons over 15 years of age having passed through the X-ray trailer of the Santa Clara County Tuberculosis Association. This number represented 83 percent of the estimated population over 15 years of age available in the area covered by the survey.

The following is a break-down of the 4,196 X-rays taken during the survey:

Total films read	4,196
Essentially negative	4,034
Suspicious of abnormality	162
Suspicious of tuberculosis	
Cardiovascular	16
Other chest pathology	

Follow-up findings as of July 12, 1951, are as follows:

115.	
Examined and found to be negative	66
Verification of active tuberculosis	18
Verification of arrested tuberculosis	13
Further observation indicated	18
Cardiovascular	3
Results unknown (moved away, etc.)	8
Total follow-ups completed to July 12th	126

#### A Rural Demonstration

This survey is important as it is a successful demonstration of mass X-ray practice in a small rural community using the equipment and personnel of the local tuberculosis association and health department cooperating with an organization of volunteers from the community.

The Gilroy Community X-ray Survey is an excellent demonstration of community organization in action. Success of the survey can be measured not only in terms of numbers surveyed—83 percent of the "available" population—but also by the way in which local leadership and citizen participation took the initiative in planning and conducting the project.

This report of the Gilroy Survey will be followed in subsequent issues of California's Health by articles on county-wide surveys completed in recent months in Los Angeles, San Benito and Contra Costa Counties, and in Oxnard, Ventura County.

For a period of several years prior to 1950 the Santa Clara County Health Department and the Santa Clara County Tuberculosis Association, as well as the local medical association, had been aware of the fact that there appeared to be a higher incidence of tuberculosis in the Gilroy area than in other areas of Santa Clara County. The major evidence seemed to indicate a reservoir of infection in the area, and discussion of this fact by inter-

ested members of the above named organizations led to the decision to attempt a mass X-ray survey in the City of Gilroy and vicinity.

Late in April of 1950 a Central Planning Committee was set up consisting of representatives from the Santa Clara County Department of Health, the tuberculosis association, and the Gilroy Coordinating Council. The first three weeks of the month of October, 1950, were reserved on the calendar for operation of the tuberculosis association's mobile X-ray unit in the Gilroy area.

It was decided to include in the survey the area around the City of Gilroy coterminous with the Gilroy Union High School District and to restrict the X-raying to the population above the age of 15 years.

The area surrounding the city and outside the city limits was divided into five subareas with a chairman to be appointed for each district. The city itself was divided into two groups, the residential district and the business districts. In addition to these divisions, a separate category was established for those industries em-

ploying large numbers of people as it was felt that at least in some cases it would be advantageous to take the mobile unit to these industries and X-ray the employees on the job.

#### Selection of Chairmen and Committees

Selection of chairmen was done with great care and they were asked to establish their respective committees as soon as possible so as to have a part in the planning of the survey.

Early in the planning a Committee on Education and Publicity was established. The initial publicity, with excellent cooperation from the local press, was aimed mainly at awakening the general public to the problem at hand. The survey chairman, the public health nurses, the county health educator, and members of the medical profession talked to local civic groups and organizations.

A mass meeting of community leaders was sponsored by the Gilroy Coordinating Council and the doctor in charge of the Tuberculosis Ward of the Santa Clara County Hospital was the principal speaker. At this meeting the general plans for the survey were explained and a request for volunteers was made.

Additional committees were formed for the actual operation of the survey and consisted of:

- (1) Contact committees for each area to personally canvass the area, contact each person and explain the survey, answer questions, and make appointments for the actual X-raying.
- (2) A Control Committee to process the appointments and send out definite appointment cards. This committee also had the responsibility of checking the actual X-raying and relaying information on missed appointments to the contact committee chairmen for recontact. Appointments were made for each 15 minutes from 2 p.m. to 8 p.m., Monday through Friday, of the first two weeks of October. Approximately 20 persons were given appointments for each 15-minute interval.
- (3) A Baby Sitting Committee was formed with high school girl volunteers to stay with small children where parents could not otherwise get away.
- (4) A Transportation Committee was established for those who might have need of such service.
- (5) A Reception Committee was organized consisting of over 100 volunteers from various clubs and organizations. This committee was to operate in shifts to take care of the various detail jobs and sign-up work at the mobile unit during actual operation of the X-ray unit.

#### Intensive Survey Activity

The Central Planning Committee met weekly during the summer and its members carried on the general planning and supervision of the various other committees.

ga

wl

X.

be

pi

in

ist

pu

be

ra

re

N.

Each of the committees held several meetings, usually attended by one of the Central Planning Committee members. These meetings were for the purpose of organization and instruction. Mimeographed materials were furnished to the various committees, giving the general plans of the survey and the purposes and functions of each committee.

Check sheets, reminder sheets, appointment slips, printed materials on tuberculosis, and samples of the various other materials were distributed widely. An effort was made to give every person working on the survey as complete a picture as possible of all details so as to better understand their individual place in the survey.

Contact workers were instructed to avoid giving an actual appointment time, but rather to indicate preference of date or time of day. The Control Committee worked out the detail scheduling and post cards were mailed to all persons giving exact day and time of appointment. This procedure was necessary to insure a steady flow at the X-ray unit and individuals were urged to make every effort to keep their appointments. Contact workers were supplied with materials in both English and Spanish for educational purposes, and Spanish speaking workers were selected to canvass the areas where the population was predominantly Spanish.

#### **Pre-survey Contacting Was Significant**

The contacting was carried out during the last two weeks of September with the following results:

Total number contacted	4.009
Out of town, vacations, etc	26
Ill or under doctor's care	16
Had recent chest X-rays	135
Outright refusals	89
Total appointments made	3,743

Regular appointments were made for the first two weeks of October, and during this time the flow of persons through the mobile unit was fairly constant, with X-rays averaging about one per minute. The third week of October was reserved for on-the-spot X-raying at the larger industrial plants, with the last two days set aside for follow-up work on missed appointments

Throughout the survey, and particularly at the time contacting was being done, care was taken to keep publicity going out through all available channels.

The Santa Clara Medical Association contributed paid advertising. Printed and mimeographed materials were sent out through the public schools and taken home by the children, news publicity was almost continuous, slides in both Spanish and English were shown daily at the local theaters, and extensive use was made of placards and lighted displays. A mobile sound system was used to advertise the survey in both English

and Spanish, and local clergymen urged their congregations to cooperate.

#### **Gratifying Response**

of

ls ne e-

n

ils

p-

ts.

th

nd

he

ng

he

en

Community response was excellent. More than 300 persons took an active part in conducting the survey, while more than that number volunteered their services.

The entire expense of the survey was borne by the County Tuberculosis Association and the Department of Public Health and approximated \$1 per person X-rayed. The largest cost was for the X-ray film itself.

The X-rays taken were 4 x 5 stereos, with each film being double checked by a panel of specialists. Suspicious films were read three times by different members of the panel before reports were mailed.

Follow-up work on suspicious films is still continuing, but figures to date indicate that the survey was successful as a case-finding operation and there is evidence to indicate that the educational value of the survey to the community of Gilroy has been considerable.

## San Diego Supervising PHN Wanted

The Civil Service Commission of San Diego announces a vacancy for a supervising public health nurse.

Applicants must possess a valid certificate of registration as a public health nurse. Registration as a public health nurse by the State of California is necessary before permanent appointment can be made.

Salary range is \$311 to \$378, and applications will be received until further notice. They are obtainable at Room 402, Civic Center, San Diego 1, California.

#### **State Civil Service Examination**

Senior clinical laboratory technician, salary range \$281-\$341, and clinical laboratory technician, salary range \$255-\$310. These two examinations will be given September 15th. Applications will be received until August 25th. Applicants must be citizens, but need not be residents of California.

Providing entrance requirements are met, a single application may be made for one or both of these examinations. Additional information is available from the State Personnel Board, 1015 L Street, Sacramento.

## Sanitarians to Hold Annual Meeting

The fifteenth annual meeting of the National Association of Sanitarians will be held in Miami Beach, Florida, August 21st to 25th, according to an announcement by William J. McLarty, of Los Angeles, a member of the Promotion and Publicity Committee for N. A. S.

# Hospital Construction Funds Aid Four New Projects

Construction got under way during June on three new hospitals and one health center which are receiving assistance under the hospital survey and construction program. The hospitals include a 14-bed facility for the Seneca Hospital District in Chester, Plumas County; the 287-bed O'Connor Hospital in San Jose; and the 74-bed Mercy Hospital in Redding. The new health center is being constructed in Fresno to house the Freno County Health Department.

The Bureau of Hospitals reports that bidding on these projects demonstrates a substantial increase in construction costs over that experienced prior to the outbreak of hostilities in Korea. Cost per square foot exceeded \$26 in each of the four projects, as compared with \$20 per square foot or less prior to June 25, 1950.

Construction cost, including fixed equipment, on a per bed basis was bid as follows: \$14,795.40 for the O'Connor Hospital, \$16,849.81 for Mercy Hospital, and \$20,332.15 for Seneca Hospital.

# **Local Health Officer Changes**

Mr. George M. Milardovich is the new Health Officer of the City of Jackson, Amador County. He replaces Mr. Richard Maggi.

In the same county, Mr. Henry Morenzoni has replaced Mr. John D. Culbert as Health Officer for the City of Amador.

Raymond C. Leer, M.D., has been appointed as Health Officer for Santa Cruz County, succeeding R. O. Ingham, M.D.

The newly incorporated City of Huron, Fresno County, has contracted with the Fresno County Health Department for the continuation of health services to that area.

# Gambusia Affinis Program in L. A.

Gambusia affinis, the tiny fish which destroy mosquito larvae and prevent neighborhood infestation from ponds and other small water areas, recently appeared as the main attraction on Mayor Fletcher Bowron's weekly television program in Los Angeles.

The event was part of Los Angeles' annual give away, in which the city turns over 50,000 of the larvae destroyers to anyone 16 or over for the asking.

The program will continue into September. The Los Angeles City Health Department has established convenient distribution centers throughout the ciy.

The television debut of *Gambusia affinis* was one way in which the distribution centers were publicized by the Los Angeles City Health Department,

# OCCUPATIONAL DISEASES IN CALIFORNIA, 1950

HERBERT K. ABRAMS, M.D., Chief, and PATRICIA WARR, Public Health Analyst, Bureau of Adult Health

Reported cases of diseases attributable to occupational exposure totaled 12,245 during 1950, and fatalities numbered 85. Of the total injuries reported, one out of three resulted in lost time on the job beyond the day of injury.

Table 1, which gives a breakdown of cases by disease group and industry shows that diseases of the skin accounted for more than half (54 percent) of all cases reported. Half of these were due to poison oak and an almost equally large proportion were caused by contacts with oils, greases and solvents. Diseases of the eye made up 14 percent of the total. Another 14 percent involved diseases of the bones and organs of movement.

The leading occupational hazards responsible for these diseases were plant and animal products (mainly poison oak), which caused 36 percent of the total. Repeated motion, pressure and sudden shock caused 19 percent, and radiation (mainly welding are flash burns), caused 14 percent. Many old and well known hazards, such as lead, mercury, carbon monoxide, carbon tetrachloride and silica continued to be reported; as well as relatively newer agents, such as beryllium and the newer agricultural chemicals.

Thirty-five percent of all occupational diseases occurred among workers in manufacturing industries. Fifteen percent affected agricultural workers and 14 percent affected construction workers.

Occupational diseases were reported from all counties except Alpine. Los Angeles County accounted for 34 percent of the total, San Francisco for 6 percent, Alameda for 5 percent and Santa Clara for 4 percent.

Table 2, which gives the distribution of the 85 occupational disease fatalities by cause, shows that almost half were due to heart disease. It is significant to note that such preventable diseases as pneumoconioses caused 27 deaths, or 32 percent of the total. In addition, there were two deaths from berylliosis.

#### Source of Data

Physicians in California who attend an employee covered by the State Workmen's Compensation Act are required under Section 6407 of the Labor Code to report to the State Department of Industrial Relations all occupational injuries (defined to include accidents and occupational diseases) "unless disability resulting from such injury does not last through the day or does not require medical service other than ordinary first-aid treatment." The Division of Labor Statistics and Research of the Department of Industrial Relations prepares statistics and reports on injuries due to in-

dustrial accidents. In accordance with an interagency agreement, the Bureau of Adult Health of the Department of Public Health reviews and analyzes the occupational disease reports.

The use of these reports is a valuable aid in evaluating the occupational health problem in the State, and in determining which areas and which industries have the greatest need for preventive health services. Collection and analysis of occupational disease data is useful not only to the Bureau of Adult Health in planning and evaluating its own program, but in helping local health departments which have undertaken industrial health programs. Abstracts of the occupational disease reports are routinely transmitted to local health departments having industrial hygiene personnel and programs.

In an effort to investigate the more serious occupational diseases reported, the records are reviewed by members of the bureau staff in order to determine methods of follow-up. During 1950, follow-ups were made on approximately 500 reported cases. Follow-up ranged from correspondence to complete plant studies. Many occupational health bulletins were distributed to physicians and lay groups, and personal contact was made with physicians, management, labor, and others.

An example of the type of information made available by this reporting system is the increase in the number of reported illnesses from exposure to agricultural chemicals. In 1950, 293 such cases were reported. They ranged from superficial inflammations of the skin and mucous membrane to serious systemic conditions, and caused illness to manufacturers, packers, and field workers. Approximately 100 systemic effects were reported in 1950, and emphasis was placed on following up these cases in an effort to prevent the occurrence of needless illness among workers who handle these valuable chemicals. This information is also used in cooperation with other private and public agencies interested in the field.

#### Limitations

The reporting system is limited by the facts that (1) the California Workmen's Compensation Act does not cover maritime workers, federal employees, railroad workers in interstate commerce, and workers employed by farmers who elect not to be covered, and (2) only a first report is now required; this covers only the preliminary findings made by the physician and does not in all cases reflect the final diagnosis. Also the report gives only the estimated amount of lost time, resulting in some inaccuracy as to the length of disability.

Reported Cases of Occupational Diseases by Disease Group and Major Industry Group: California, 1950

		Industry group									
Disease group	Total	Agri- culture	Mining and quarrying	Con- struction	Manu- facturing	Transportation, communication and utilities	Trade	Finance, insurance and real estate	Service	Govern- ment	Not stated
Total, all diseases	12,245	1,823	65	1,770	4,273	644	747	69	865	1,399	590
Infective and parasitic diseases, total	205	92	1	5	40	3	12	1	33	14	4
BrucellosisOther infective and parasitic diseases	18 187	4 88	1	5	12 28	3	1 11	1	33	1 13	4
Diseases of the eye, total	1,726	66	33	260	947	96	31		68	69	156
Conjunctivitis and ophthalmia due to welding flash burns	1,672 51	65 1	33	256 4	926 19 2	92 4	23 8	*********	58 9	64 5	155
Diseases of the ear	38			2	13	12	1	1	4	4	1
Diseases of the respiratory system, total	331	39	3	22	129	19	19	3	32	50	18
Acute upper respiratory infection Influenza, pneumonia, bronchitis Silicosis and other pneumoconioses	60 160 9	3 23 1	2	6 12	28 49 5	2 11	4 10	1	7 13 2	5 35	
Other and unspecified diseases of the respiratory system	102	12	1	4	47	6	5	2	10	10	1
Diseases of the skin, total	6,615	1,135	14	1,030	1,757	404	460	39	487	1,028	26
Occupational dermatitis due to oils, greases, solvents and chemicals. Occupational dermatitis due to poison oak Other diseases of the skin	2,723 3,302 590	408 602 125	4 8 2	221 760 49	1,205 346 206	65 317 22	367 24 69	11 24 4	246 187 54	87 892 49	10: 14: 10:
Diseases of the bones and organs of movement, total.	1,703	151	3	226	875	44	140	13	133	43	7.
Synovitis, bursitis and tenosynovitis	1,496 207	127 24	3	213 13	764 111	39 5	120 20	11 2	113 20	36 7	7
Systemic effects of industrial poisons, total	339	5	4	28	174	10	14	3	21	71	
Poisoning by industrial solvents	23 65 27 224	5	1 1 2	2 6 1 19	14 56 11 93	2 4 4	3 11	3	5 2 14	1 4 66	
Effects of poisoning by other substances2	620	212	4	71	122	26	27	4	40	74	4
Effects of weather, exposure and related conditions, total	273	65	2	57	69	10	15	1	13	28	1
Heat and insolationOther effects	246 27	62	2	54	65	6 4	13 2	1	7 6	25 3	1
Burns,² total		21		60	84	6	20	1	22	12	
Chemical burnsOther burns	231	21		60	81	6	20	1	22	12	
Neoplasms, total	6	1		1	1					2	
MalignantBenign	3 3	1		1	1					1 1	
Allergic disorders4	79	14	1	4	31	10	8	2	4	1	
Diseases of the circulatory system	10	5		1		. 1		*******	. 2	1	
Diseases of the genito-urinary system	2	1		1							
Symptoms referable to systems or organs and ill-defined conditions	31	4		2	18	1		1	2	1	
Prophylactic treatment (tetanus and rabies) and medical examination without sickness	28	10			. 11	2			3	1	
Not specified	5	2			2				. 1		

<sup>&</sup>lt;sup>1</sup> Diseases attributable to occupational exposure. Excludes diseases of employees not covered by the California Workmen's Compensation Act, such as maritime workers, railroad workers in interstate commerce and workers employed by farmers who elect not to be covered.
<sup>3</sup> These include effects of poisoning by pharmaceuticals, renom and other and unspecified substances; they are mainly effects of insect bites or stings.

y tl-

ld re 1. is 1g naal n-

ay 10 re ıp

be as S. ilnal ey nd nd ld e-

of ured

at es ilm-2) he es ·e-

·e-

y.

<sup>&</sup>lt;sup>3</sup> These consist only of burns arising from repeated exposures, mainly from chemicals. Burns from heat, fires or explosions are reported in the accident statistics of the Department of Industrial Relations.
<sup>4</sup> This includes urtlearia, asthma, angioneurotic edema, allergic rhinitis and conjunctivitis, and unspecified allergic disorders.
SOURCE: State of California, Department of Industrial Relations, Doctor's First Report of Work Injury, Statistics compiled by State Department of Public Health, Bureau of Adult Health.

Table 2 Occupational Disease Fatalities:1 California, 1950

Disease	Number of fatalities
Total, all diseases	85
Diseases of the heart	42
Diseases of the lung, total	35
Asbestosis	2 2 8 16 1 2 4
Poisonings, total	7
Carbon monoxide	1 3 1 1
Tetanus	

<sup>&</sup>lt;sup>1</sup>With the exception of silicotuberculosis deaths, these reports represent death benefits awarded by the Industrial Accident Commission in 1950 to persons covered by the California Workmen's Compensation Act. The tabulation relates to the year in which the claim was paid, and not to the year of death.

<sup>2</sup> Data on deaths from silicotuberculosis obtained from the records of the State Department of Public Health.

SOURCE: State of California, Department of Industrial Relations. Reports of fatalities. Statistics compiled by State Department of Public Health, Bureau of Adult Health.

Adult Health.

June 20, 1951

# **Nutrition Study of the Aging Yields Preliminary Data**

A number of significant factors concerning the nutritional status of the aging are indicated in preliminary analysis of nutritional, physical and laboratory data obtained in a study of 577 persons 50 years of age and over in San Mateo County, according to a report by Harold D. Chope, M.D., Dr. P.H., San Mateo County Health Officer, and Sheldon Dray, M.D., Redwood City, in a recent issue of California Medicine.\* This study, carried out during 1948-1949, was a joint cooperative research project by the U.S. Bureau of Human Nutrition and Home Economics; the U.S. Public Health Service; the Department of Home Economics of the College of Agriculture, University of California; the California State Department of Publie Health; and the Department of Public Health and Welfare of San Mateo County, with the cooperation of the San Mateo County Medical Society.

The San Mateo project was but one phase of a fiveyear study being conducted by the Western Agricultural Experiment Stations, the U.S. Bureau of Human Nutrition and Home Economics, and the U.S. Public Health Service. Principal source of support for the local study came from an annual \$40,000 grant made by Congress to the 11 Agricultural Experiment Stations of Western United States for research in human nutrition.

or

ca

te ni

as

di

pl

Pl

re

th

gu

sta

co

be

ac

of

an

pa

cu

80

ve

gle

cu

ho

ex

CO

sp

gin

we

sh

da

#### **Objectives**

Objectives of the San Mateo study included: determination of the relationship between nutritional status and the degenerative diseases of the aging, development and application of methods of assessing human nutrition and health status of the aging, and development of effective procedures in the correction of nutritional deficiencies and other diseases discovered by the health appraisal.

The authors point out that "there is an obvious need for research in the field of human nutrition in our aging population, since this group is ever increasing in the total population. Very little is known of the physiological mechanisms involved in the aging process nor is it clearly understood what is meant by pathological changes in contrast to the so-called inevitable normal involutionary changes. Certainly, it may be hoped that as new scientific facts are gathered people may not only lead a longer, but also a more functionally active and socially useful life."

The 577 persons in the study included 280 males and 297 females, from 50 to 89 years of age. The sample represented all economic groups and geographic areas of San Mateo County.

Data compiled included a nutritional history from each participant; a complete physical examination, with careful attention to physical signs indicating nutritional status; and complete laboratory procedures consisting of chest X-rays, bone density determinations, and blood and urine tests.

#### Findings

Of the 577 persons studied, 243 were referred to private physicians for 377 conditions requiring attention.

Preliminary findings show obesity and hypertension to be the most common causes for referral. More women than men were overweight. Anemia was noted more often in women than in men. Serious anemia occurred more often in the higher age brackets. In a number of cases in which there was high glucose content in the blood there was no trace of sugar in the urine. This would indicate that in general surveys for diabetes, determination of the sugar content of the urine is not completely reliable.

Characteristic of the high income group was a higher percentage of ascorbic acid found in the blood.

In the final tabulation and analysis of the data answers to some of the following questions may be found:

1. Are the accepted "normal ranges" for the various blood constituents valid in the older age groups!

<sup>\*</sup> California Medicine, 74:105-107, February, 1951.

- 2. What is the relationship between food cholesterol or fat intake and the blood cholesterol level?
- 3. Is the bone density in old age correlated with calcium phosphorus intake, sun exposure, Vitamin D intake, protein intake or any other measured factor?
- 4. Is there a correlation between the intake of protein or other nutrients and blood levels of nonprotein nitrogen, uric acid or creatinine?
- 5. Are any specific dietary elements correlated or associated with kidney disease, hypertension, cardiac disease, other degenerative diseases?
- 6. What dietary factors are correlated with high or low hemoglobin levels in elderly persons?
- 7. Do high Vitamin A intake or high ascorbic acid plasma levels favorably affect the health?

# **Precautions for Use of DDT** Stated by A. M. A. Committee

The Committee on Pesticides of the Council on Pharmacy and Chemistry of the American Medical Association, in the March 10th Journal of the A. M. A., reported on safety measures in use of DDT.

Some human deaths have been caused by DDT and therefore "certain precautions must be observed to guard against its potential toxic properties," they

The following precautions were suggested by the committee:

DDT should not be used on dairy cattle or animals being prepared for slaughter since there is a danger of accumulation of the substance in the milk and tissues of treated animals.

Persons exposed to large amounts of DDT dusts and powders under confined conditions or where dust particles are not carried away by free movement of air currents should wear respirators.

Frequent or prolonged exposure to emulsions or solutions of DDT in petroleum oils and organic solvents should be avoided unless protective clothing, goggles and neoprene or solvent-resistant gloves are worn.

DDT insecticides should never be stored in food cupboards or medicine chests where there is a likelihood of contamination of food or mistaken use, and all exposed food, utensils and working areas must be covered when kitchen and dining areas are being sprayed.

Operators involved in large scale spraying or fogging with solutions of 5 percent or more of DDT should wear respirators and other protective devices. Clothes should be changed and the body cleansed after each day's operation.

## Infant, Maternal Mortality Rates **Show Sharp Drop Since 1920**

Steady improvement in saving the lives of mothers and infants during the last 30 years is shown by the trend of maternal, infant and neonatal mortality rates in California and the United States. The continuation of this trend in California is indicated by provisional rates for 1950, which again have reached new low rates of 0.5 maternal deaths and 25.3 infant deaths per 1,000 live births.

Maternal mortality and infant mortality have shown slightly higher percent declines in California than in the United States during this period, but the reverse is true of neonatal mortality. Improvement in lowering maternal mortality has been most marked (87 percent in California and 85 percent in the United States). Infant mortality has declined over 60 percent in both California and the United States. Neonatal mortality (deaths of infants under one month per 1,000 live births) has declined about 42 percent in California and 46 percent in the total United States.

Live Births, Maternal, Infant and Neonatal Mortality California, and Rates for the United States, 1920–1949 (By Place of Occurrence, 1920-1944. By Place of Residence, 1945-1949)

		Matern	al mor	tality	Infan	t morta	dity	Neonatal mortality			
Year births Cali- fornia	Cali-	ths California		United States	Califo	rnia	United States'	Califo	United		
		Number	Rate	rate	Number	Rate	rate)	Number	Rate	rate	
1920	67,198	474	7.1	8.0	5,043	75.0	85.8	2,434	36.2	41.5	
	72,438	469	6.5	6.8	4,804	66.3	75.6	2,507	34.6	39.7	
	73,321	491	6.7	6.6	5,210	71.1	76.2	2,564	35.0	39.7	
	80,237	507	6.3	6.7	5,846	72.8	77.1	2,812	35.0	39.5	
	86,899	453	5.2	6.6	5,832	67.1	70.8	2,839	32.7	38.6	
1925	85,492	490	5.7	6.5	5,855	68.5	71.7	2,884	33.7	37.8	
1926	82,372	428	5.2	6.6	5,180	62.9	73.3	2,615	31.7	37.9	
1927	84,334	447	5.3	6.5	5,268	62.5	64.6	2,642	31.3	36.1	
1928	83,643	463	5.5	6.9	5,220	62.4	68.7	2,586	30.9	37.2	
1929	81,498	426	5.5	7.0	5,139	63.1	67.6	2,567	31.5	36.9	
1930	84,382	443	5.2	6.7	4,945	58.6	64.6	2,505	29.7	35.7	
1931	81,553	510	6.2	6.6	4,609	56.5	61.6	2,504	30.7	34.6	
1932	78,108	448	5.7	6.3	4,125	52.8	56.7	2,343	30.0	33.5	
1933	75,229	364	4.8	6.2	4,022	53.5	58.1	2,224	29.6	34.0	
1934	78,442	346	4.4	5.9	4,047	51.6	60.1	2,260	28.8	34.1	
1935	80,222	375	4.7	5.8	3,973	49.5	55.7	2,283	28.4	32.4	
1936	84,460	401	4.7	5.7	4,478	53.0	57.1	2,414	28.6	32.6	
1937	94,286	392	4.1	4.9	5,060	53.7	54.4	2,704	28.7	31.3	
1938	101,617	341	3.4	4.4	4,450	43.8	51.0	2,623	25.8	29.6	
1939	103,656	314	3.0	4.0	4,367	42.1	48.0	2,700	26.0	29.3	
1940	111,840	318	2.8	3.8	4,428	39.6	47.0	2,846	25.4	28.8	
1941	125,052	289	2.3	3.2	4,579	36.6	45.3	3,111	24.9	27.7	
1942	153,120	312	2.0	2.6	5,382	35.1	40.4	3,639	23.8	25.7	
1943	173,103	358	2.1	2.5	5,981	34.6	40.4	3,937	22.7	24.7	
1944	176,988	302	1.7	2.3	6,158	34.8	39.8	4,228	23.9	24.7	
1945 1946 1947 1948	182,111 217,222 243,808 239,518 244,905	297 270 235 207 163	1.6 1.2 1.0 0.9 0.7	2.1 1.6 1.3 1.2 NA	5,978 6,676 7,204 6,858 6,571	32.8 30.7 29.5 28.6 26.8	38.3 33.8 32.2 32.0 430.9	4,107 4,882 5,186 5,002 4,765	22.6 22.5 21.3 20.9 19.4	24.3 24.0 22.8 22.2 NA	

a Provisional. -Not available.

Note: Rates are per 1,000 live births.

SOURCE: State of California, Department of Public Health, Vital Statistics

Records United States National Office of Vital Statistics, Vital Statistics Special

Can we expect further reduction in maternal and infant mortality in California? The fact that some areas of the State have rates well above the state total indicates that we can. Moreover, examination of data on maternal deaths by cause shows that preventable deaths from complications of pregnancy, delivery and the puerperium still occur. In infant mortality, although great improvements have been made in the control of the communicable diseases which formerly took a heavy toll, there are many unsolved problems associated with premature birth, which has long been considered the "leading cause of infant mortality." Even with the progress already made, we can expect still further lowering of both maternal and infant mortality.—Florence Olson, Chief, Reports Section, Bureau of Records and Statistics.

# Pediatric Consultation Services Offered in Southern California

In cooperation with the Department of Pediatrics, University of Southern California School of Medicine, a plan has been developed for pediatric consultation services in the southern part of the State.

Dr. George N. Donnell was appointed pediatric consultant on the staff of the Children's Hospital of Los Angeles, Department of Pediatrics, University of Southern California School of Medicine, on June 1, 1951.

The purposes of this program are (1) to bring consultation services to local practicing physicians who take care of children in rural areas, thus extending the teaching services of the medical school to these doctors, and (2) to assist the teaching center in developing post-graduate training programs in pediatrics to meet the needs of rural practicing physicians.

The pediatric consultant will be available for consultation to rural practicing physicians and health departments in the southern part of the State and will participate in post-graduate training programs currently conducted by the Department of Pediatries of the University of Southern California School of Medicine which include: (1) a six weeks' in-resident preceptorship in pediatrics at the Children's Hospital in Los Angeles for general practicing physicians from rural areas, and (2) residency training program whereby pediatric residents are assigned on a three months' rotating basis to outlying county hospitals. This latter program has been carried out for the past two years in Imperial County where it has been supplemented by lectures for the general practicing physicians conducted by visiting pediatricians from the Children's Hospital.

The residency training program began at the Orange County Hospital July 1, 1951. Here local pediatricians will participate with the pediatric consultant in the supervision of the residents and in ward rounds and meetings to include all local physicians interested in pediatrics.

# California Morbidity Report-June, 1951

Civilian Cases

		Week	ending	Total cases	5-yr. me- dian	Total cases	
Reportable diseases	6-9	6-16	6-23	6-30	June	1946- 1950 June	Jan June, incl.
AmebiasisAnthrax	12	13	12	5	42	26	266
Botulism Brucellosis (undulant fever) Chancroid Chickenpox	4	3 5 973	2 2 672	4 6 479	10 17 3,451	17 36 3,258	8 50 165 29,547
Cholera			1	2	3	7	34
the newborn		1			1	1	5
Diarrhea of the newborn. Diphtheria. Encephalitis, infectious. Epilepsy. Food poisoning. German measles. Gonococcus infection. Granuloms inguinale. Hepatitis, infectious. Influensa, epidemie. Lencosy.	5 3 28 1 176 352 1 4 4	29 1 123 324 1 6 3 1	2 1 23 11 96 306 1 5	3 1 49 7 63 313 8 10	1 16 5 129 20 458 1,295 3 23 29 2	1 43 7 121 63 453 2,330 4 19 33	18 110 28 782 81 3,839 8,258 8 143 3,948
Leptospirosis (Weil's disease) Lymphogranuloma venereum Malaria Measles Meningitis, meningococcal Mumps Pertussis	3,475 9 527 94	2,087 2 439 76	1 1 1,473 4 315 62	1,085 4 260 79	8,130 19 1,541 311	14 4 4,864 21 3,155 410	51 5 61,623 178 11,700 1,464
Plague Pneumonia, primary infectious Poliomyelitis, acute anterior	28 19	18 25	21 29	35 47	102 120	138	1,342 533
PsittacosisRabies, animalRabies, human		3	2	1	8	27	38
Relapsing fever Rheumatic fever Rocky Mountain spotted fever	6	9	6	4 1 9	25 1 28	61 1 17	140 3 128
Salmonella infections <sup>2</sup>	4	14	7	15	40	31	224
Streptococcal infections, resp. including searlet fever. Syphilis. Tetanus. Trachoma. Trichinosis.	204 186 1	161	167 157	122 162	654 679 1 10	410 1,568 5	5,539 4,870 21 12 9
Tuberculosis: Respiratory. Other forms. Tularemia. Typhoid fever. Typhus fever. Yellow fever.	142 9 1	144	155 8	230 20 2	671 43 1 5	789 50 1 9	4,248 229 8 31
					17,906		139,692

Rheumatic fever cases over age 21 are excluded, beginning January 1, 1951.
 All types of salmonella infections now reportable. Prior to January 1, 1950, on
 A, B and C types were reportable, hence five-year median not entirely comparable

printed in CALIFORNIA STATE PRINTING OFFICE



Documents Division General Library Univ. of Michigan Ann Arbor, Mich.

